

WHAT IS CLAIMED IS:

1. A fixing apparatus, comprising:
 - magnetic flux generation means for generating a magnetic flux by energization,
 - 5 an induction heating member for generating heat by the magnetic flux generated by said magnetic flux generating means to heat an unfixed image on a recording material by the generated heat,
 - temperature detection means for detecting a
 - 10 temperature of said induction heating member,
 - temperature control means for controlling the temperature of said induction heating member to a predetermined target temperature on the basis of information of said temperature detection means,
 - 15 heat generating rate change means for changing a heat generating rate of said induction heating means, and
 - density detection means for detecting information as to a density of an image to be formed
 - 20 on the recording material,
 - wherein said heat generating rate change means changes the heat generating rate on the basis of the information of said density detection means.
- 25 2. A fixing apparatus, comprising:
 - magnetic flux generation means for generating a magnetic flux by energization,

an induction heating member for generating heat by the magnetic flux generated by said magnetic flux generating means to heat an unfixed image on a recording material by the generated heat,

5 temperature detection means for detecting a temperature of said induction heating member,

 temperature control means for controlling the temperature of said induction heating member to a predetermined target temperature on the basis of
10 information of said temperature detection means,

 heat generating rate change means for changing a heat generating rate of said induction heating means, and

 density detection means for detecting
15 information as to a density of an image to be formed on the recording material,

 wherein said heat generating rate change means changes the heat generating rate on the basis of the information of said density detection means
20 without changing the predetermined target temperature.

3. An apparatus according to Claim 1 or 2, wherein said magnetic flux generation means has an exciting coil, and said heat generating rate change
25 means changes the heat generating rate by changing a frequency of a high-frequency current to be applied to the exciting coil.

4. An apparatus according to Claim 1 or 2,
wherein said heat generating rate change means changes
an electric power for energizing said magnetic flux
5 generation means.

5. An apparatus according to Claim 1 or 2,
wherein said magnetic flux generation means has an
exciting coil, and said heat generating rate change
10 means changes a current to be applied to the exciting
coil of said magnetic flux generation means.

6. An apparatus according to Claim 1 or 2,
wherein said magnetic flux generation means has an
15 exciting coil, and said heat generating rate change
means changes a voltage to be applied to the exciting
coil of said magnetic flux generation means.

7. An image forming apparatus, comprising:
20 image forming means for forming an unfixed
image on a recording material,
magnetic flux generation means for
generating a magnetic flux by energization,
an induction heating member for generating
25 heat by the magnetic flux generated by said magnetic
flux generating means to heat the unfixed image on the
recording material by the generated heat,

temperature detection means for detecting a temperature of said induction heating member,

temperature control means for controlling the temperature of said induction heating member to a
5 predetermined target temperature on the basis of information of said temperature detection means,

heat generating rate change means for changing a heat generating rate of said induction heating means, and

10 density detection means for detecting information as to a density of an image to be formed on the recording material,

wherein said heat generating rate change means changes the heat generating rate on the basis of
15 the information of said density detection means.

8. An image forming apparatus, comprising:

image forming means for forming an unfixed image on a recording material,

20 magnetic flux generation means for generating a magnetic flux by energization,

an induction heating member for generating heat by the magnetic flux generated by said magnetic flux generating means to heat the unfixed image on the
25 recording material by the generated heat,

temperature detection means for detecting a temperature of said induction heating member,

temperature control means for controlling the temperature of said induction heating member to a predetermined target temperature on the basis of information of said temperature detection means,

5 heat generating rate change means for changing a heat generating rate of said induction heating means, and

 density detection means for detecting information as to a density of an image to be formed
10 on the recording material,

 wherein said heat generating rate change means changes the heat generating rate on the basis of the information of said density detection means without changing the predetermined target temperature.

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9. An apparatus according to Claim 7 or 8, wherein said magnetic flux generation means has an exciting coil, and said heat generating rate change means changes the heat generating rate by changing a
20 frequency of a high-frequency current to be applied to the exciting coil.

10. An apparatus according to Claim 7 or 8, wherein said heat generating rate change means changes
25 an electric power for energizing said magnetic flux generation means.

11. An apparatus according to Claim 7 or 8,
wherein said magnetic flux generation means has an
exciting coil, and said heat generating rate change
means changes a current to be applied to the exciting
5 coil of said magnetic flux generation means.

12. An apparatus according to Claim 7 or 8,
wherein said magnetic flux generation means has an
exciting coil, and said heat generating rate change
10 means changes a voltage to be applied to the exciting
coil of said magnetic flux generation means.

13. A fixing apparatus, comprising:
a heating member for heating an unfixed image
15 on a recording material,
heating means for generating heat by
energization to heat said heating member,
temperature detection means for detecting a
temperature of said heating member,
20 temperature control means for controlling the
temperature of said heating member to a predetermined
target temperature on the basis of information of said
temperature detection means,
electric power change means for changing an
25 electric power of said heating means, and
density detection means for detecting
information as to a density of an image to be formed

on the recording material,

wherein said heat generating rate change means changes the heat generating rate on the basis of the information of said density detection means
5 without changing the predetermined target temperature.

14. An apparatus according to Claim 13, wherein said electric power change means changes a current applied to said heating means.

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15. An apparatus according to Claim 13, wherein said electric power change means changes a voltage applied to said heating means.

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16. An image forming apparatus, comprising:
image forming means for forming an unfixed image on a recording material,

a heating member for heating the unfixed image on the recording material,

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heating means for generating heat by energization to heat said heating member,

temperature detection means for detecting a temperature of said heating member,

temperature control means for controlling the
25 temperature of said heating member to a predetermined target temperature on the basis of information of said temperature detection means,

electric power change means for changing an
electric power of said heating means, and

density detection means for detecting
information as to a density of an image to be formed
5 on the recording material,

wherein said heat generating rate change
means changes the heat generating rate on the basis of
the information of said density detection means
without changing the predetermined target temperature.

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17. An apparatus according to Claim 16, wherein
said electric power change means changes a current
applied to said heating means.

15 18. An apparatus according to Claim 16, wherein
aid electric power change means changes a voltage
applied to said heating means.

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